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## Clinical profile of patients with alcoholic liver disease

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### ABSTRACT

Alcoholic liver disease (ALD) is a major cause of mortality and morbidity worldwide. Various studies show contradictory results about the role of amount, type and duration of alcohol exposure in determining the risk to develop ALD with ethnic variations in susceptibility to develop ALD and South Asians are shown to be more prone to develop ALD. This study was carried out to evaluate clinical profile of ALD in Kadapa region. Material and Method: The present study is a retrospective study, conducted at Department Of Surgery, Fathima Institute of Medical Sciences, Kadapa, AP. during January 2013 to May 2015. Informed written consent was taken from all the selected study subjects. The study included 50 patients. Results: Majority of our cases were in the age range of  $\geq 60$  (54%). 92% cases were males and 8% were females. Ascites, Melena and Jaundice were present in 60.0%. Among the study subjects 60% were from rural areas.

**Keywords:** Alcoholic liver disease, cirrhosis Kadapa, aetiology, complications, prognosis, mortality

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### INTRODUCTION

In cirrhosis, normal liver is replaced with fibrotic tissue as well as regenerative nodules leading to progressive loss of liver function, [1] representing the final histological pathway for variety of chronic liver disease. It accounts for significant morbidity and mortality worldwide.[2] Cirrhosis can be asymptomatic or present with complications like Ascites, Spontaneous bacterial peritonitis (SBP), Hepatorenal syndrome (HRS), Variceal haemorrhage, Hepatic encephalopathy (HE), Hepatopulmonary syndrome and Hepatocellular carcinoma (HCC). In the West, predominant aetiology is alcohol and NASH. Although in developing countries, viral hepatitis B and C are still common, but alcohol and autoimmune related cirrhosis may be increasing. [3] Alcoholic liver disease encompasses a spectrum of injury, ranging from simple steatosis to frank cirrhosis.[4,5] It may well represent the oldest form of liver injury known to mankind. Evidence suggests that fermented beverages existed at least early as the Neolithic period (cir. 10,000 BC).[6] Chronic and excessive alcohol ingestion is one of the major causes of liver disease in western world.[7,8]

### AIM:

This study was carried out to evaluate clinical profile of ALD in Kadapa region.

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### MATERIAL AND METHOD

The present study is a retrospective study, conducted at Department Of Surgery, Fathima Institute of Medical Sciences, Kadapa, AP. during January 2013 to May 2015. Informed written consent was taken from all the selected study subjects. Of the total patients who were admitted with Alcoholic Liver Disease (ALD) during the study period only 50 patients were included for the study. Based on simple random sampling, study subjects were selected. All the case sheets of such patients were retrospectively studied and whole data was screened for various variables like age of the patients, their sex, cause of the ALD, signs and symptoms, operative findings, various procedures employed were recorded. A case of Alcoholic liver disease is diagnosed in patients with history of significant alcohol intake, physical signs of liver disease, and supporting laboratory investigations.[9]

### RESULT

In this study, the patient's age ranged from 18 to 75 years. Majority of our cases were in the age range of  $\geq 60$  (54%). 92% cases were males and 8% were females. Ascites, Melena and Jaundice were present in 60.0%. Among the study subjects 60% were from rural areas.

**Table 1: Age and gender distribution of study subjects**

Age group in years	Frequency (%)		Total (%)
	Male	Female	
15-30	2	0	2 (4)
30-45	5	0	5 (10)
45-60	15	1	16 (32)
≥60	24	3	27 (54)
<b>Total</b>	<b>46 (92)</b>	<b>4 (8)</b>	<b>50 (100)</b>

**Table 2: Locality wise distribution of study subjects**

Locality	Male	Female	Total (%)
Rural	29	1	30 (60)
Urban	17	3	20 (40)
<b>Total</b>	<b>46 (92)</b>	<b>4 (8)</b>	<b>50 (100)</b>

**Table 3: Clinical findings**

Clinical findings	Frequency	Percentage
Ascites	30	60
Melena	30	60
Jaundice	30	60
Hepatomegaly	25	50
Anorexia	20	40
Hepatic Encephalopathy	17	34
Hematemesis	17	34
Weight loss	15	30
Fever	15	30
Oliguria	12	24
Pedal oedema	8	16
Spider naevi	2	4

**Table 4: Liver function test**

Parameters	Mean	SD	Minimum	Maximum	Median	IQ range
AST (U/L)	143.95	157.85	10	1370	99	59-164
ALT (U/L)	80.56	132.7	6	1400	50	31.5-82.5
AST:ALT ratio	2.25	1.31	0.3	7.7	2	1.4-2.69
PT difference (s)	6.27	6.15	0	46.51	4.9	2.22-8.02
Total bilirubin (mg/dL)	4.03	4.2	0.5	26.4	2.2	1.2-5.05
Direct bilirubin	2.51	3.53	0.2	21	1.2	0.4-3
Indirect bilirubin	1.44	1.46	0.1	8.6	0.9	0.6-1.8
Albumin (g/dL)	3.23	0.87	1.4	6.3	3.1	2.6-3.9
A:G ratio	0.97	0.51	0.2	3.1	0.9	0.7-1.2

## DISCUSSION

The clinical profile among the cirrhosis patients is largely unknown in this part of region. Most of our cases were in the age range of ≥60 (54%). 92% cases were males and 8% were females. The

findings are similar to other studies [10]. This may be associated with a variation in the drinking pattern or medical care seeking practice between sexes in these two geographic locations. The risk factors for ALD are duration and quantity of alcohol drinking, hepatitis C virus (HCV) status

and nutrition (both malnutrition and obesity) [11,12]. The practice of consuming locally available/home-made alcohol of various concentrations in this part of the world has made it difficult to calculate the amount of alcohol consumed.

Jaundice was the most common presenting feature in our study consistent with a study carried out in other parts of the country [13]. Increased sepsis, reduced life span have been observed in cirrhotics with poor nutrition status compared to those without malnourishment. Complications noted in our study population were similar to those observed in many other studies like Hamzullah et al 2006 [14] that also showed ascites in 27.86 %, variceal bleeding in 18.03%, HRS in 3.27% and HCC in 1.63% patients. In another small study by Hajiani et al, [15] ascites was present in 32%, acute

variceal haemorrhage was seen in 8%, HE in 1% and HCC in 6% of patients. These studies were however with lesser number of patients.

### Conclusion

Cirrhosis of liver is a major health problem in this region and affects males in the most productive years. Alcohol abuse is the major cause of cirrhosis in this region that is entirely preventable through proper education and legislation.

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